

PSD-LA-721, AI NO. 689

**AUTHORIZATION TO OPERATE AN EXISTING FACILITY
PURSUANT TO THE PREVENTION OF SIGNIFICANT DETERIORATION
REGULATIONS IN LOUISIANA ENVIRONMENTAL REGULATORY CODE,
LAC 33:III.509**

In accordance with the provisions of the Louisiana Environmental Regulatory Code, LAC 33:III.509,

Marathon Pipe Line LLC
539 South Main St.
Findlay, Ohio 45840

is authorized to operate the Zachary Station, a breakout station at

922 US Highway 61
Jackson
East Feliciana Parish, Louisiana 70748

subject to the emissions limitations, monitoring requirements and other conditions set forth hereinafter.

This permit and authorization to construct shall expire at midnight on _____, 2008, unless physical on site construction has begun by such date, or binding agreements or contractual obligations to undertake a program of construction of the source are entered into by such date.

Signed this _____ day of _____, 2006.

public notice

BRIEFING SHEET

**ZACHARY STATION
AGENCY INTEREST NO. 689
MARATHON PIPE LINE LLC
JACKSON, EAST FELICIANA PARISH, LOUISIANA
PSD-LA-721**

PURPOSE

To obtain a PSD permit for the Zachary Station at Jackson.

RECOMMENDATION

Approval of the proposed permit.

REVIEWING AGENCY

Louisiana Department of Environmental Quality, Office of Environmental Services.

PROJECT DESCRIPTION

Zachary Station is a breakout station for finished petroleum products. Refined products are received at the terminal via a 20 inch pipeline originating at Marathon Refinery in Garyville, Louisiana. There are currently nine storage tanks that temporarily store the product before it is shipped out via an outgoing pipeline. These tanks are used to store distillates, gasoline, and transmix (off-spec mixture of gasoline and distillates). Normally the transmix is sold to a third party for reprocessing. Some transmix may be used for blending at the station.

Currently, the facility is capable of handling a maximum of 109.4 million barrels per year of throughput of refined products. The facility proposes to increase the refined product handling capacity of the station from 109.4 to 175.1 million barrels per year. In order to achieve this goal the facility will install five new storage tanks and a new vapor combustor to control loading rack emissions.

Prevention of Significant Deterioration (PSD) review is required for the modification of an existing major source that results in a significant increase of regulated pollutants. Emissions increases due to the increase in handling capacity for VOC pollutant is above the significance level and must undergo netting analysis. The following tables show the emissions increases and the required netting analysis.

Estimated emissions increases due to the increase in handling capacity from the new equipment and the affected equipment are greater than the PSD significance levels for VOC irrespective of any increases or decreases. The project increase is based on actual average emissions of two past consecutive years within ten years to their proposed allowable post project emissions or the current permitted emissions; whichever is lower, in tons per year is as follows:

BRIEFING SHEET

**ZACHARY STATION
AGENCY INTEREST NO. 689
MARATHON PIPE LINE LLC
JACKSON, EAST FELICIANA PARISH, LOUISIANA
PSD-LA-721**

<u>Pollutant</u>	<u>2004/2005 Average Emissions (a)</u>	<u>Project Emissions (b)</u>	<u>Affected Equipment Emissions (c)</u>	<u>Total Emissions Increase</u>
PM ₁₀	-	<0.01	-	<0.01
SO ₂	-	<0.01	-	<0.01
NO _x	-	0.10	-	0.10
CO	-	0.21	-	0.21
VOC	128.75	40.85	160.76	72.86

The netting analysis indicated that the overall emissions increase from the project is over the PSD significance levels 40 tons per year for VOC emissions. The increase in VOC emissions from the project is less than 100 tons per year; therefore, dispersion modeling is not required.

Under PSD regulations a Best Available Control Technology (BACT) analysis is required for the units or equipment that is physically modified or is new and emits pollutants that are increasing above the significance levels. In this case BACT is required for all the new equipment installed (storage tanks) and the affected equipment (loading rack) under the handling capacity increase project. Internal floating roof is considered as BACT for all the new tanks and a vapor combustor as add on control is considered BACT for the loading rack. Permitted emissions from the facility in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
PM ₁₀	-	<0.01	<0.01
SO ₂	-	<0.01	<0.01
NO _x	-	0.10	0.10
CO	-	0.21	0.21
VOC	198.17	241.72	+ 43.55

TYPE OF REVIEW

The original permit was reviewed in accordance with PSD regulations for VOC emissions. The BACT was based on the new equipment and the existing equipment which are being modified.

BRIEFING SHEET

ZACHARY STATION
AGENCY INTEREST NO. 689
MARATHON PIPE LINE LLC
JACKSON, EAST FELICIANA PARISH, LOUISIANA
PSD-LA-721

BEST AVAILABLE CONTROL TECHNOLOGY

The BACT was determined as internal floating roofs for the five new storage tanks. The loading rack will have add on control, vapor combustor, which was determined as BACT.

AIR QUALITY IMPACT ANALYSIS

PSD regulations require an analysis of existing air quality for those pollutants emitted in significant amounts from a proposed facility.

The pollutant of concern is VOC emissions. The VOC emissions are less than 100 tons per year; therefore, air quality impact analysis is not required.

ADDITIONAL IMPACTS

The increase in VOC emissions is less than 100 tons per year; therefore, there will be no significant impact on area soils, vegetation, or visibility.

PROCESSING TIME

Application Dated:	July 20, 2006
Application Updated:	
Effective Completeness:	November 6, 2006

PUBLIC NOTICE

A notice requesting public comment on the Part 70 permits were published in The Advocate, Baton Rouge, Louisiana; *****; on November **, 2006. Written and oral comments received during the comment period from the general public and organizations will be considered before issuing the permit. Copies of the public notice were mailed out to individuals on the mailing list maintained by Office of Environmental Services on November **, 2006. The proposed permits were sent to EPA via e-mail on November **, 2006.

PRELIMINARY DETERMINATION SUMMARY

**ZACHARY STATION
AGENCY INTEREST NO. 689
MARATHON PIPE LINE LLC
JACKSON, EAST FELICIANA PARISH, LOUISIANA
PSD-LA-721, NOVEMBER 6, 2006**

I. APPLICANT

Marathon Pipe Line LLC
539 South Main St.
Findlay, Ohio 45840

II. LOCATION

Marathon Pipe Line LLC, Zachary Station is located at on 922 US Highway 61, Jackson, East Feliciana Parish, Louisiana 70748; approximate UTM coordinates are 665.20 kilometers East and 3398.10 kilometers North, Zone 15.

III. PROJECT DESCRIPTION

Zachary Station is a breakout station for finished petroleum products. Refined products are received at the terminal via a 20 inch pipeline originating at Marathon Refinery in Garyville, Louisiana. There are currently nine storage tanks that temporarily store the product before it is shipped out via an outgoing pipeline. These tanks are used to store distillates, gasoline, and transmix (off-spec mixture of gasoline and distillates). Normally the transmix is sold to a third party for reprocessing. Some transmix may be used for blending at the station.

Currently, the facility is capable of handling a maximum of 109.4 million barrels per year of throughput of refined products. The facility proposes to increase the refined product handling capacity of the station from 109.4 to 175.1 million barrels per year. In order to achieve this goal the facility will install five new storage tanks and a new vapor combustor to control loading rack emissions.

Prevention of Significant Deterioration (PSD) review is required for the modification of an existing major source that results in a significant increase of regulated pollutants. Emissions increases due to the increase in handling capacity for VOC pollutant is above the significance level and must undergo netting analysis. The following tables show the emissions increases and the required netting analysis.

Estimated emissions increases due to the increase in handling capacity from the new equipment and the affected equipment are greater than the PSD significance levels for VOC irrespective of any increases or decreases. The project increase is based on actual average emissions of two past consecutive years within ten years to their proposed allowable post project emissions or the current permitted emissions; whichever is lower, in tons per year is as follows:

PRELIMINARY DETERMINATION SUMMARY

ZACHARY STATION
AGENCY INTEREST NO. 689
MARATHON PIPE LINE LLC
JACKSON, EAST FELICIANA PARISH, LOUISIANA
PSD-LA-721, NOVEMBER 6, 2006

<u>Pollutant</u>	<u>2004/2005</u>		<u>Affected Equipment</u>	<u>Total Emissions</u>
	<u>Average Emissions</u>	<u>Project Emissions (b)</u>		
	<u>(a)</u>			
PM ₁₀	-	<0.01	-	<0.01
SO ₂	-	<0.01	-	<0.01
NO _x	-	0.10	-	0.10
CO	-	0.21	-	0.21
VOC	128.75	40.85	160.76	72.86

The netting analysis indicated that the overall emissions increase from the project is over the PSD significance levels 40 tons per year for VOC emissions. The increase in VOC emissions from the project is less than 100 tons per year; therefore, dispersion modeling is not required.

IV. SOURCE IMPACT ANALYSIS

A proposed net increase in the emission rate of a regulated pollutant above de minimis levels for proposed major sources requires review under PSD regulations, 40 CFR 52.21. PSD permit reviews of proposed new or modified major stationary sources require the following analyses:

- A. A determination of the Best Available Control Technology (BACT);
- B. Analysis of the existing air quality and a determination of whether or not preconstruction or postconstruction monitoring will be required;
- C. An analysis of the source's impact on total air quality to ensure compliance with the National Ambient Air Quality Standards (NAAQS);
- D. An analysis of the PSD increment consumption;
- E. An analysis of the source related growth impacts;
- F. An analysis of source related impacts on soils, vegetation, and visibility;
- G. A Class I Area impact analysis; and
- H. An analysis of the impact of toxic compound emissions.

A. BEST AVAILABLE CONTROL TECHNOLOGY

Under current PSD regulations, an analysis of "top down" BACT is required for the control of each regulated pollutant emitted from a new major source in excess of the specified

PRELIMINARY DETERMINATION SUMMARY

**ZACHARY STATION
AGENCY INTEREST NO. 689
MARATHON PIPE LINE LLC
JACKSON, EAST FELICIANA PARISH, LOUISIANA
PSD-LA-721, NOVEMBER 6, 2006**

significant emission rates. The top down approach to the BACT process involves determining the most stringent control technique available for a similar or identical source. If it can be shown that this level of control is infeasible based on technical, environmental, energy, and/or cost considerations, then it is rejected and the next most stringent level of control is determined and similarly evaluated. This process continues until a control level is arrived at which cannot be eliminated for any technical, environmental, or economic reason. A technically feasible control strategy is one that has been demonstrated to function efficiently on identical or similar processes.

VOC emissions are above PSD de minimis levels and must undergo PSD analysis. Controls for VOC emissions were analyzed using a "top down" approach.

BACT Analysis for Storage Tanks

Control techniques for VOC include Fixed Roof Tanks with Closed Vent System, Internal Floating Roof Tanks, External Floating Roof Tanks, and add on control Thermal Oxidizers.

All the above referenced technologies are technically feasible.

Thermal Oxidation combusts VOC streams with a control efficiency ranging from 95 to 99%. Thermal oxidation can be used for control of any VOC containing stream, including storage tanks. the environmental and energy impacts from thermal oxidizers are minimal. The VOC Cost Effectiveness for installing Thermal Oxidizers is \$25,408 per ton reduction. This technology is technically feasible but is rejected due to economical infeasibility.

Zachary Station proposes NSPS, 40 CFR 60, Subpart Kb requirements (internal floating roofs) as BACT for new storage tanks.

BACT Analysis for Loading Rack

Control techniques for VOC include Steam or Air Assisted and Non Assisted Combustion Devices.

Zachary station proposes a vapor combustor to achieve a maximum peak VOC emission limit of 10 mg/liter loaded as BACT for VOC emissions for all the products having a true vapor pressure greater than 1.5 psia.

C. NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) ANALYSIS

Modeling is not required for VOC emission increase less than 100 tons per year.

PRELIMINARY DETERMINATION SUMMARY

**ZACHARY STATION
AGENCY INTEREST NO. 689
MARATHON PIPE LINE LLC
JACKSON, EAST FELICIANA PARISH, LOUISIANA
PSD-LA-721, NOVEMBER 6, 2006**

D. PSD INCREMENT ANALYSIS

PSD Increment analysis is not required.

E. SOURCE RELATED GROWTH IMPACTS

Source related growth impacts analysis is not required.

F. SOILS, VEGETATION, AND VISIBILITY IMPACTS

The increase in VOC emissions is less than 100 tons per year; therefore, there will be no significant impact on area soils, vegetation, or visibility.

G. CLASS I AREA IMPACTS

Breton National Wildlife Area, the nearest Class I area, is more than 100 kilometers from the site, precluding any significant impact.

H. TOXIC IMPACT

The selection of control technology based on the BACT analysis included consideration of control of toxic emissions.

V. CONCLUSION

The Department of Environmental Quality - Office of Environmental Services has made a preliminary determination to approve the PSD permit modification for the Marathon Pipe Line LLC, Zachary Station in Jackson, East Feliciana Parish, Louisiana, subject to the attached specific and general conditions. In the event of a discrepancy in the provisions found in the application and those in this Preliminary Determination Summary, the Preliminary Determination Summary shall prevail.

SPECIFIC CONDITIONS

**ZACHARY STATION
AGENCY INTEREST NO. 689
MARATHON PIPE LINE LLC
JACKSON, EAST FELICIANA PARISH, LOUISIANA
PSD-LA-721**

This permit is issued under the following conditions:

1. The permittee is authorized to operate in conformity with the specifications submitted to the Louisiana Department of Environmental Quality (LDEQ) as analyzed in LDEQ's document entitled "Preliminary Determination Summary", dated November 20, 2006 and subject to the following emission limitations and other specific conditions. Specifications submitted are contained in the application and Emission Inventory Questionnaire (EIQ) dated August 2, 2006, as well as additional information as of November 2006.
2. Permittee shall demonstrate compliance with the limitations of this permit, permittee shall conduct emissions monitoring and perform compliance/emissions tests for the Vapor Combustor, Emission Point V-1, using methods specified by the cited regulations and 40 CFR 60, Appendix A, Method 18 – Measurement of gaseous organic compound emissions by gas chromatography. Use alternate stack test methods only with the prior approval of the Office of Environmental Assessment, Environmental Technology Division, Engineering Services. As required by LAC 33:III.913, provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits and control efficiency.
3. Permittee shall operate and maintain the vapor combustor to manufacturer's specifications (stack temperature control, burn control, pilot automation, alarms, etc,) to achieve a maximum peak VOC emission control limit of 10 mg/L loaded.
4. The new storage tanks, Emission Points T-1, T-4, T-9, T-13, and T-14, shall be equipped with internal floating roof and shall comply with all the applicable requirements of 40 CFR 60, Subpart Kb – Standards of Performance for Volatile Organic liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.

LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS

- I. This permit is issued on the basis of the emissions reported in the application for approval of emissions and in no way guarantees that the design scheme presented will be capable of controlling the emissions to the type and quantities stated. Failure to install, properly operate and/or maintain all proposed control measures and/or equipment as specified in the application and supplemental information shall be considered a violation of the permit and LAC 33:III.501. If the emissions are determined to be greater than those allowed by the permit (e.g. during the shakedown period for new or modified equipment) or if proposed control measures and/or equipment are not installed or do not perform according to design efficiency, an application to modify the permit must be submitted. All terms and conditions of this permit shall remain in effect unless and until revised by the permitting authority.
- II. The permittee is subject to all applicable provisions of the Louisiana Air Quality Regulations. Violation of the terms and conditions of the permit constitutes a violation of these regulations.
- III. The attached Annual Emission Rates listing and/or Emission Inventory Questionnaire sheets establish the emission limitations and are a part of the permit. Any operating limitations are noted in the Specific Conditions or, where included, Tables 2 and 3 of the Permit. The synopsis is based on the application and Emission Inventory Questionnaire dated July 20, 2006 as well as the additional information as of October 2006.
- IV. This permit shall become invalid, for the sources not constructed, if:
 - A. Construction is not commenced, or binding agreements or contractual obligations to undertake a program of construction of the project are not entered into, within two (2) years (18 months for PSD permits) after issuance of this permit, or;
 - B. If construction is discontinued for a period of two (2) years (18 months for PSD permits) or more.The administrative authority may extend this time period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project. However, each phase must commence construction within two (2) years (18 months for PSD permits) of its projected and approved commencement date.
- V. The permittee shall submit semiannual reports of progress outlining the status of construction, noting any design changes, modifications or alterations in the construction schedule which have or may have an effect on the emission rates or ambient air quality levels. These reports shall continue to be submitted until such time as construction is certified as being complete. Furthermore, for any significant change in the design, prior approval shall be obtained from the Office of Environmental Services, Permits Division.
- VI. The permittee shall notify the Department of Environmental Quality, Office of Environmental Services, Permits Division within ten (10) calendar days from the date that construction is certified as complete and the estimated date of start-up of operation. The appropriate Regional Office shall also be so notified within the same time frame.

LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS

- VII. Any emissions testing performed for purposes of demonstrating compliance with the limitations set forth in paragraph III shall be conducted in accordance with the methods described in the Specific Conditions and, where included, Tables 1, 2, 3, 4, and 5 of this permit. Any deviation from or modification of the methods used for testing shall have prior approval from the Office of Environmental Assessment, Environmental Technology Division
- VIII. The emission testing described in paragraph VII above, or established in the specific conditions of this permit, shall be conducted within sixty (60) days after achieving normal production rate or after the end of the shakedown period, but in no event later than 180 days after initial start-up (or restart-up after modification). The Office of Environmental Assessment, Environmental Technology Division shall be notified at least (30) days prior to testing and shall be given the opportunity to conduct a pretest meeting and observe the emission testing. The test results shall be submitted to the Environmental Technology Division within sixty (60) days after the complete testing. As required by LAC 33:III.913, the permittee shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.
- IX. The permittee shall, within 180 days after start-up and shakedown of each project or unit, report to the Office of Environmental Compliance, Surveillance Division any significant difference in operating emission rates as compared to those limitations specified in paragraph III. This report shall also include, but not be limited to, malfunctions and upsets. A permit modification shall be submitted, if necessary, as required in Condition I.
- X. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of at least five (5) years.
- XI. If for any reason the permittee does not comply with, or will not be able to comply with, the emission limitations specified in this permit, the permittee shall provide the Office of Environmental Compliance, Surveillance Division with a written report as specified below.
 - A. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33.I.Chapter 39.
 - B. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.
 - C. A written report shall be submitted quarterly to address all emission limitation exceedances not included in paragraphs 1 or 2 above. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any emission limitation exceedances occurring during the corresponding specified calendar quarter:
 1. Report by June 30 to cover January through March
 2. Report by September 30 to cover April through June
 3. Report by December 31 to cover July through September
 4. Report by March 31 to cover October through December

**LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS**

- D. Each report submitted in accordance with this condition shall contain the following information:
1. Description of noncomplying emission(s);
 2. Cause of noncompliance;
 3. Anticipated time the noncompliance is expected to continue, or corrected, the duration of the period of noncompliance;
 4. Steps taken by the permittee to reduce and eliminate the noncomplying emissions; and
 5. Steps taken by the permittee to prevent recurrences of the noncomplying emissions.
- E. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided all information specified above is included. For Part 70 sources, reports submitted in accordance with Part 70 General Condition R shall serve to meet the requirements of this condition provided all specified information is included. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107.
- XII. Permittee shall allow the authorized officers and employees of the Department of Environmental Quality, at all reasonable times and upon presentation of identification, to:
- A. Enter upon the permittee's premises where regulated facilities are located, regulated activities are conducted or where records required under this permit are kept;
 - B. Have access to and copy any records that are required to be kept under the terms and conditions of this permit, the Louisiana Air Quality Regulations, or the Act;
 - C. Inspect any facilities, equipment (including monitoring methods and an operation and maintenance inspection), or operations regulated under this permit; and
 - D. Sample or monitor, for the purpose of assuring compliance with this permit or as otherwise authorized by the Act or regulations adopted thereunder, any substances or parameters at any location.
- XIII. If samples are taken under Section XII.D. above, the officer or employee obtaining such samples shall give the owner, operator or agent in charge a receipt describing the sample obtained. If requested prior to leaving the premises, a portion of each sample equal in volume or weight to the portion retained shall be given to the owner, operator or agent in charge. If an analysis is made of such samples, a copy of the analysis shall be furnished promptly to the owner, operator or agency in charge.
- XIV. The permittee shall allow authorized officers and employees of the Department of Environmental Quality, upon presentation of identification, to enter upon the permittee's premises to investigate potential or alleged violations of the Act or the rules and regulations adopted thereunder. In such investigations, the permittee shall be notified at the time entrance is requested of the nature of the suspected violation. Inspections under this subsection shall

**LOUISIANA AIR EMISSION PERMIT
GENERAL CONDITIONS**

be limited to the aspects of alleged violations. However, this shall not in any way preclude prosecution of all violations found.

- XV. The permittee shall comply with the reporting requirements specified under LAC 33:III.919.E as well as notification requirements specified under LAC 33:III.927.
- XVI. In the event of any change in ownership of the source described in this permit, the permittee and the succeeding owner shall notify the Office of Environmental Services, Permits Division, within ninety (90) days after the event, to amend this permit.
- XVII. Very small emissions to the air resulting from routine operations, that are predictable, expected, periodic, and quantifiable and that are submitted by the permitted facility and approved by the Permits Division are considered authorized discharges. Approved activities are noted in the General Condition XVII Activities List of this permit. To be approved as an authorized discharge, these very small releases must:
 - 1. Generally be less than 5 TPY
 - 2. Be less than the minimum emission rate (MER)
 - 3. Be scheduled daily, weekly, monthly, etc., or
 - 4. Be necessary prior to plant startup or after shutdown [line or compressor pressuring/depressuring for example]

These releases are not included in the permit totals because they are small and will have an insignificant impact on air quality. This general condition does not authorize the maintenance of a nuisance, or a danger to public health and safety. The permitted facility must comply with all applicable requirements, including release reporting under LAC 33:I.3901.

- XVIII. Provisions of this permit may be appealed in writing pursuant to La. R.S. 30:2024(A) within 30 days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the secretary or the assistant secretary elects to suspend other provisions as well. Construction cannot proceed except as specifically approved by the secretary or assistant secretary. A request for hearing must be sent to the following:

Attention: Office of the Secretary, Legal Services Division
 La. Dept. of Environmental Quality
 Post Office Box 4302
 Baton Rouge, Louisiana 70821-4302

- XIX. Certain Part 70 general conditions may duplicate or conflict with state general conditions. To the extent that any Part 70 conditions conflict with state general conditions, then the Part 70 general conditions control. To the extent that any Part 70 general conditions duplicate any state general conditions, then such state and Part 70 provisions will be enforced as if there is only one condition rather than two conditions.

ZACHARY STATION
 AGENCY INTEREST NO. 689
MARATHON PIPE LINE LLC
JACKSON, EAST FELICIANA PARISH, LOUISIANA
PSD-LA-721, NOVEMBER 6, 2006

TABLE I: BACT COST SUMMARY

Control Alternatives for Storage Tanks		Availability / Feasibility	Negative Impacts (a)	Control Efficiency %	Emissions Reduction (TPY)	Annualized Cost (\$)	Cost Effectiveness (\$/Ton)	Notes
VOC	Thermal Oxidation (New Tanks)	Yes/No	1	98		\$25,408		
	Floating Roof (New Tanks)	Yes/Yes	None	>95				Chosen as BACT

Notes:

- a) Negative impacts: 1) economic, 2) environmental, 3) energy, 4) safety
- b) Technically infeasible, economic analysis was not performed

TABLE I: BACT COST SUMMARY

Control Alternatives for Loading Rack		Availability / Feasibility	Negative Impacts (a)	Control Efficiency %	Emissions Reduction (TPY)	Annualized Cost (\$)	Cost Effectiveness (\$/Ton)	Notes
VOC	Thermal Oxidation	Yes/No	None	95-98				Identical Technology
	Vapor Combustor	Yes/No	None	> = 99 or 10 mg/L				Chosen as BACT

Notes:

- a) Negative impacts: 1) economic, 2) environmental, 3) energy, 4) safety
- b) Technically infeasible, economic analysis was not performed

ZACHARY STATION
AGENCY INTEREST NO. 689
MARATHON PIPE LINE LLC
JACKSON, EAST FELICIANA PARISH, LOUISIANA
PSD-LA-721, NOVEMBER 6, 2006

TABLE III: SUMMARY OF PROPOSED BACT

Source Description	Pollutant	Most Feasible BACT Selected
New Storage Tanks	VOC	Internal Floating Roof
Loading Rack	VOC	Add on control, Vapor Combustor

ZACHARY STATION
AGENCY INTEREST NO. 689
MARATHON PIPE LINE LLC
JACKSON, EAST FELICIANA PARISH, LOUISIANA
PSD-LA-721, NOVEMBER 6, 2006

TABLE IV: MAXIMUM ALLOWABLE EMISSION RATES

EQT	ID/EIQ	Capacity MM BTU/hr	PM/PM ₁₀ Lbs/hr tons/yr	Maximum Permitted Emission Rates					
				SO ₂ Lbs/hr tons/yr	NO _x Lbs/hr tons/yr	CO Lbs/hr tons/yr	VOC Lbs/hr tons/yr	H ₂ S Lbs/hr tons/yr	H ₂ SO ₄ Lbs/hr tons/yr
EQT012	T-1	-	-	-	-	-	-	3.16	CAP
EQT013	T-4	-	-	-	-	-	-	2.17	CAP
EQT014	T-9	-	-	-	-	-	-	2.11	CAP
EQT015	T-13	-	-	-	-	-	-	0.66	CAP
EQT016	T-14	-	-	-	-	-	-	3.16	CAP
EQT017	V-1	-	-	-	-	-	-	1.90	1.25

CAP is limited to 218.73 tons per year, includes existing storage tanks which are affected by the project but are not modified.

ZACHARY STATION
AGENCY INTEREST NO. 689
MARATHON PIPE LINE LLC
JACKSON, EAST FELICIANA PARISH, LOUISIANA
PSD-LA-721, NOVEMBER 6, 2006

TABLE V: COMPLIANCE TEST REQUIREMENTS

Emission Point	Control Devices / Work Practices	Test Method	Criteria Being Tested	Notes
V-1	Vapor Combustor for control of loading rack emissions	40 CFR 60, Appendix A, Method 1-4 40 CFR 60, Appendix A, Method 18	Stack parameters VOC	Shall operate the vapor combustor to the manufacturers specifications

URS

COPY

LDEQ RECEIPT

original to I.O.A.
copy to Syed P. S. Quadri

HAND DELIVERED

6 SEP 12 P 2 8

September 11, 2006

Mr. Chuck Carr Brown, Ph.D.
Assistant Secretary
Office of Environmental Services
Louisiana Department of Environmental Quality
P.O. Box 4313
Baton Rouge, Louisiana 70821-4313

RECEIVED
SEP 12 2006

Re: Marathon Pipe Line LLC - Zachary Station
Zachary Station Expansion Project
Permit Number 0880-00009-V1
Agency Interest No. 689
Activity No.: PER20060001 & PER20060002

LDEQ

Dear Dr. Brown:

On behalf of our client, Marathon Pipe Line LLC (Marathon), URS Corporation is submitting the enclosed addendum to the July 2006 PSD and Part 70 Permit Application for the Zachary Station. This facility currently operates under Permit No. 0880-00009-V1 issued on April 4, 2003. This addendum includes revisions to storage tank 80-8 to allow storage of both distillate and gasoline.

Three copies of this addendum are being submitted to the LDEQ. If you or your staff have any questions or require additional information, please contact me at (225) 922-5928 or Mr. Gary Wilson of Marathon at (419) 421-3385.

Sincerely,

Sami m. Aouad
Sami Aouad, P.E.

Senior Project Manager
URS Corporation

Attachment

cc: w/ attachment
Syed Quadri, LDEQ
Gary Wilson, Marathon Pipe Line LLC
U.S. EPA Region VI

Department of Environmental Quality		Permits Division P.O. Box 4313 Baton Rouge, LA 70821-4313 (225) 219-3181		SINGLE POINT/AREA/VOLUME SOURCE Emission Inventory Questionnaire (EIQ) for Air Pollutants		Date of Submittal September 2006	
Company Name Marathon Pipe Line LLC	Source ID Number CAP	Plant location and name (if any) Zachary Station	Approx. location of stack or vent (see inst. on how to determine location of area srcs)				
Descriptive name of the equipment served by this stack or vent Tank CAP		UTM Zone No. 15	Horizontal Coordinate mE	UTM Zone No. 16	Vertical Coordinate mN		
Height of stack above grade (ft) N/A	Diameter (ft) or stack discharge area (ft ²) N/A (ft) (ft²)	Stack gas exit temperature (Deg F) N/A	Stack gas flow at process conditions, not at standard (ft ³ /min) N/A	Stack gas exit velocity (ft/sec) N/A	Date of construction / modification N/A	Operating rate (Max) or tank capacity N/A	
Type of fuel used and heat input Fuel		Operating Characteristics		Percent of annual throughput of pollutants through this emission point Dec-Feb Mar-May Jun-Aug Sep-Nov	Normal operating time of this point hrs/day days/yr	Normal Operating Rate N/A	
Type of fuel 	Heat Input (MMBTU/hr) 	25	25	25	24	Wk/yr 52	
Air Pollutant Specific Information							
Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Average (lbs/hr)	Maximum (lbs/hr)	Annual (ton/yr)	Emission Estimation Method	Add, Change, or Delete Code
TOTAL VOC (INCL. LISTED)			49.94		218.73		Change
2,2,4-TRIMETHYLPENTANE			0.38		1.67		Change
BENZENE			0.36		1.58		Change
ETHYLBENZENE			0.05		0.23		Change
HEXANE (-N)			0.76		3.33		Change
TOLUENE			0.62		2.70		Change
XYLENE (MIXED ISOMERS)			0.23		1.01		Change

 <p>LOUISIANA SINGLE POINT/AREA/VOLUME SOURCE Emission Inventory Questionnaire (EIQ) for Air Pollutants</p>		<p>Date of Submittal September 2006</p>																																																																																		
Company Name Marathon Pipe Line LLC	Plant location and name (if any) Zachary Station																																																																																			
Source ID Number 80-8	<table border="1"> <tr> <td colspan="2">Descriptive name of the equipment served by this stack or vent</td> <td colspan="2">Approx. location of stack or vent (see inst. on how to determine location of area srcs)</td> </tr> <tr> <td colspan="2">Refined Products/Distillates Tank</td> <td>UTM Zone No.</td> <td>Horizontal Coordinate</td> </tr> <tr> <td colspan="2"></td> <td>15</td> <td>665400 mE</td> </tr> <tr> <td colspan="2"></td> <td>16</td> <td>3398300 mN</td> </tr> <tr> <td colspan="2"></td> <td>N/A</td> <td>3360000 gal</td> </tr> </table>			Descriptive name of the equipment served by this stack or vent		Approx. location of stack or vent (see inst. on how to determine location of area srcs)		Refined Products/Distillates Tank		UTM Zone No.	Horizontal Coordinate			15	665400 mE			16	3398300 mN			N/A	3360000 gal																																																													
Descriptive name of the equipment served by this stack or vent		Approx. location of stack or vent (see inst. on how to determine location of area srcs)																																																																																		
Refined Products/Distillates Tank		UTM Zone No.	Horizontal Coordinate																																																																																	
		15	665400 mE																																																																																	
		16	3398300 mN																																																																																	
		N/A	3360000 gal																																																																																	
Stack and Discharge Physical Characteristics Change <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Height of stack above grade (ft) N/A	Diameter (ft) or stack discharge area (ft ²) N/A (ft) (ft ²)	Stack gas exit temperature (Deg F) N/A																																																																																	
			Stack gas flow at process conditions, not at standard (ft ³ /min) N/A																																																																																	
			Operating rate (Max) or tank capacity 3360000 gal																																																																																	
Fuel	Type of fuel	Type of fuel used and heat input	Percent of annual throughput of pollutants through this emission point																																																																																	
	Heat Input (MMBTU/hr)	Operating Characteristics	Dec-Feb Mar-May Jun-Aug Sep-Nov																																																																																	
			hrs/day days/wk wk/yr																																																																																	
			25 25 25 24 7 52																																																																																	
<p>Air Pollutant Specific Information</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Control Equipment Code</th> <th>Control Equipment Efficiency (%)</th> <th>Average (lbs/hr)</th> <th>Maximum (lbs/hr)</th> <th>Emission Rate (tons/yr)</th> <th>Emission Estimation Method</th> <th>Add, Change, or Delete Code</th> <th>Concentration of gases exiting at stack</th> </tr> </thead> <tbody> <tr> <td>TOTAL VOC (INCL. LISTED)</td> <td></td> <td></td> <td>3.23</td> <td></td> <td></td> <td>3</td> <td></td> <td></td> </tr> <tr> <td>2,2,4-TRIMETHYLPENTANE</td> <td></td> <td></td> <td>0.03</td> <td></td> <td></td> <td>3</td> <td></td> <td></td> </tr> <tr> <td>BENZENE</td> <td></td> <td></td> <td>0.03</td> <td></td> <td></td> <td>3</td> <td></td> <td></td> </tr> <tr> <td>ETHYL BENZENE</td> <td></td> <td></td> <td><0.01</td> <td></td> <td></td> <td>3</td> <td></td> <td></td> </tr> <tr> <td>HEXANE (-N)</td> <td></td> <td></td> <td>0.04</td> <td></td> <td></td> <td>3</td> <td></td> <td></td> </tr> <tr> <td>METHYL TERT-BUTYL ETHER</td> <td></td> <td></td> <td></td> <td></td> <td>7</td> <td>Delete</td> <td></td> <td></td> </tr> <tr> <td>TOLUENE</td> <td></td> <td></td> <td>0.04</td> <td></td> <td></td> <td>3</td> <td></td> <td></td> </tr> <tr> <td>XYLENE (MIXED ISOMERS)</td> <td></td> <td></td> <td>0.02</td> <td></td> <td></td> <td>3</td> <td></td> <td></td> </tr> </tbody> </table> <p>Methyl Tert-Butyl Ether is no longer included in the refined products stored at the Zachary Station.</p>				Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Average (lbs/hr)	Maximum (lbs/hr)	Emission Rate (tons/yr)	Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack	TOTAL VOC (INCL. LISTED)			3.23			3			2,2,4-TRIMETHYLPENTANE			0.03			3			BENZENE			0.03			3			ETHYL BENZENE			<0.01			3			HEXANE (-N)			0.04			3			METHYL TERT-BUTYL ETHER					7	Delete			TOLUENE			0.04			3			XYLENE (MIXED ISOMERS)			0.02			3		
Pollutant	Control Equipment Code	Control Equipment Efficiency (%)	Average (lbs/hr)	Maximum (lbs/hr)	Emission Rate (tons/yr)	Emission Estimation Method	Add, Change, or Delete Code	Concentration of gases exiting at stack																																																																												
TOTAL VOC (INCL. LISTED)			3.23			3																																																																														
2,2,4-TRIMETHYLPENTANE			0.03			3																																																																														
BENZENE			0.03			3																																																																														
ETHYL BENZENE			<0.01			3																																																																														
HEXANE (-N)			0.04			3																																																																														
METHYL TERT-BUTYL ETHER					7	Delete																																																																														
TOLUENE			0.04			3																																																																														
XYLENE (MIXED ISOMERS)			0.02			3																																																																														

Marathon Pipe Line LLC
Zachary Station

Source ID: 80-8
Description: Refined Products/Distillates Tank

TANKS 4.09d Results

Component: Gasoline/Distillate
Annual Op Hrs: 8760 hrs/yr
Tank Capacity 2.63 MMgal

Tank Emissions	Annual Avg Emissions^a Lb/yr	Annual Max Emissions^b Lb/yr	Hourly Avg Emissions Lb/hr	Hourly Max Emissions Lb/hr	Annual Emissions Tons/yr
VOC (Inclusive)	22691.81	28283.34	2.59	3.23	11.35
n-hexane ^c	363.07	452.53	0.04	0.05	0.18
benzene ^c	204.23	254.55	0.02	0.03	0.10
toluene ^c	294.99	367.68	0.03	0.04	0.15
2,2,4 - Trimethylpentane ^c	181.53	226.27	0.02	0.03	0.09
xylene ^c	113.46	141.42	0.01	0.02	0.06
ethyl benzene ^c	22.69	28.28	0.00	0.00	0.01

a - Emissions were calculated by TANKS 4.09d Program using the throughput specified above. Emissions reflect worst case scenario from gasoline storage.

b - Max hourly emission rates were calculated by TANKS 4.09d assuming 14 RVP and 42 turnover per year.

c - VOC speciation was obtained from Table C-5 in Appendix C of "Gasoline Distribution Industry (Stage 1) - Background Information for Proposed Standards" EPA-453/R94-002a.

TANKS 4.0.9d

Emissions Report - Detail Format

Identification				Quantity
User Identification:	80-8 <th>City:</th> <td>Zachary<th data-kind="ghost"></th></td>	City:	Zachary <th data-kind="ghost"></th>	
State:		Louisiana		
Company:		Marathon Pipe Line, LLC		
Type of Tank:		Internal Floating Roof Tank		
Description:		Gasoline/Distillates Tank		
Tank Dimensions				
Diameter (ft):	110.00	Volume (gallons):	2,771,958.00	
Turnovers:	42.00	Self Supp. Roof? (y/n):	N	
No. of Columns:		Eff. Col. Diam. (ft):	7.00	
Eff. Col. Diam. (ft):	1.10			
Paint Characteristics				
Internal Shell Condition:	Light Rust	Shell Color/Shade:	White/White	
Shell Condition	Good	Roof Color/Shade:	White/White	
Roof Condition:	Good			
Rim-Seal System				
Primary Seal:	Vapor-mounted	Secondary Seal:	None	
Deck Characteristics				
Deck Fitting Category:	Typical	Deck Type:	Bolted	
Construction:	Sheet	Deck Seam:	Sliding Cover, Ungasketed	
Deck Seam Len. (ft):	5 Ft Wide			
	1,900.66			
Deck Fitting Status				
Access Hatch (24-in. Diam.)	Unbolted Cover, Ungasketed			
Automatic Gauge Float Well	Unbolted Cover, Ungasketed			
Column Well (24-in. Diam.)	Built-Up Col.-Sliding Cover, Ungask.			
Ladder Well (36-in. Diam.)	Sliding Cover, Ungasketed			
Roof Leg or Hanger Well	Adjustable			
Sample Pipe or Well (24-in. Diam.)	Slit Fabric Seal 10% Open			
Stub Drain (1-in. Diam.)	Slit Fabric Seal 10% Open			
Vacuum Breaker (10-in. Diam.)	Weighted Mech. Actuation, Gask.			

Microbiological Data Used in Emissions Calculations: Batan Islands, Iquitos, Peru; Amazonian River Amazonas = 14.72 ppm

TANKS 4.0 Report

Page 2 of 13

TANKS 4.0.9d

Emissions Report - Detail Format
Liquid Contents of Storage Tank

80-8 - Internal Floating Roof Tank
Zachary, Louisiana

Mixture/Component	Month	Avg.	Daily Liquid Surf. Temperature (deg F)	Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Vapor Mol. Weight. Min.	Vapor Mol. Weight. Max.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Gasoline (RVP 12)	All	68.60	64.20	74.99	67.70	7.5928	N/A	N/A	64.0000		82.00 Option 4: RVP=12, ASTM Slope=3

TANKS 4.0 Report

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

80-8 - Internal Floating Roof Tank
Zachary, Louisiana

Annual Emission Calculations

	Rim Seal Losses (lb): Seal Factor A (lb-mole/ft ²): Seal Factor B (lb-mole/ft ²): Value of Vapor Pressure Function: Vapor Pressure at Daily Average Liquid Surface Temperature (psia); Tank Diameter (ft); Vapor Molecular Weight (lb/lb-mole); Product Factor:	8,462,2043 6,7000 0,2000 0,1794 7,5928 110,0000 84,0000 1,0000
	Withdrawal Losses (lb): Number of Columns: Effective Column Diameter (ft): Annual Net Throughput (gall/yr); Shell Clingage Factor (lb/in ² 000 sqft); Average Organic Liquid Density (lb/gal); Tank Diameter (ft); Deck Fitting Losses (lb): Value of Vapor Pressure Function: Vapor Molecular Weight (lb/lb-mole); Product Factor:	213,5840 7,0000 1,1000 116,422,236,0000 0,0015 5,8600 110,0000 10,125,8463 0,1794 84,0000 1,0000 881,9000 3,880,0840 1,900,8600 0,1400 0,02000 110,0000 84,0000 1,0000
	Total Losses (lb):	22,691,8125
Roof Fitting Losses		
	Quantity	KFaf(lb-mole/yr) KFbf(lb-mole/yr mph ⁻¹)
Access Hatch (24-in. Diam.)Unbolted Cover, Ungasketed	1	38,00 5,90
Automatic Gauge Flat Wall/Unbolted Cover, Ungasketed	1	14,00 5,40
Column Wall (24-in. Diam.)/Built-Up Col./Sliding Cover, Ungasketed	7	47,00 0,00
Ladder Wall (36-in. Diam.)/Siding Cover, Ungasketed	1	76,00 0,00
Roof Leg or Hanger Wall/Adjustable	37	7,90 0,00
Sample Pipe or Walk (24-in. Diam.)/Slit Fabric Seal 10% Open	1	12,00 0,00
Stub Drain (1-in. Diameter)/	97	1,20 0,00
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask	1	6,20 0,94
		71,1852

TANKS 4.0 Report

Page 4 of 13

TANKS 4.0.9d**Emissions Report - Detail Format
Individual Tank Emission Totals****Emissions Report for: Annual****80-8 - Internal Floating Roof Tank
Zachary, Louisiana**

Losses(lbs)			
Components	Rim Seal Loss	Withdraw Loss	Deck Fitting Loss
Gasoline (RVP 12)	8,462.20	213.58	10,125.94

TANKS 4.0 Report

Page 5 of 13

TANKS 4.0.9d**Emissions Report - Detail Format****Tank Identification and Physical Characteristics**

Identification			Quantity
User Identification:	80-8 (max hourly)		
City:	Zachary		
State:	Louisiana		
Company:	Marathon Pipe Line, LLC		
Type of Tank:	Internal Floating Roof Tank		
Description:	Gasoline/Distillates Tank		
Tank Dimensions	Diameter (ft):	110.00	
	Volume (gallons):	2,771,958.00	
	Turnovers:	42.00	
	Self Supp. Roof? (y/n):	N	
No. of Columns:			
No. of Col. Diam. (ft):		7.00	
Eff. Col. Diam. (ft):		1.10	
Paint Characteristics	Light Rust:		
Internal Shell Condition:	White/White		
Shell Color/Shade:	Good		
Shell Condition	White/White		
Roof Color/Shade:	Good		
Roof Condition:	Good		
Rim-Seal System	Vapor-mounted		
Primary Seal:	None		
Secondary Seal:			
Deck Characteristics	Typical		
Deck Fitting Category:	Bolted		
Deck Type:	Sheet		
Construction:	Sheet: 5 Ft Wide		
Deck Seam:			
Deck Seam Len. (ft):	1,900.66		
Deck Fitting/Status			
Access Hatch (24-in. Diam.)/Unbolted Cover, Ungasketed		1	
Automatic Gauge Float Well/Unbolted Cover, Ungasketed		1	
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Ungask.		7	
Ladder Well (36-in. Diam.)/Sliding Cover, Ungasketed		1	
Roof Leg or Hanger Well/Adjustable		37	
Sample Pipe or Well (24-in. Diam.)/Slit Fabric Seal 10% Open		1	
Stub Drain (1-in. Diameter)/Slit Fabric Seal 10% Open		97	
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.		1	

Meteorological Data used in Emissions Calculations: Baton Rouge, Louisiana (Avg Atmospheric Pressure = 14.72 psia)

TANKS 4.0 Report

Page 6 of 13

TANKS 4.0.9d

Emissions Report - Detail Format
Liquid Contents of Storage Tank

80-8 (max hourly) • Internal Floating Roof Tank
Zachary, Louisiana

Mixture/Component	Month	Daily Liquid Surf.			Vapor Pressure (psia)			Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.	Avg.	Min.	Max.				
Gasoline (RVP 14)	All	69.60	64.20	74.99	67.70	8.9804	N/A	N/A	62.0000		\$2.00 Option 4: RVP=14, ASTM Slope=3

TANKS 4.0 Report

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

80-8 (max hourly) - Internal Floating Roof Tank
Zachary, Louisiana

Annual Emission Calculations

	Quantity	KFa(lb-mole/yr)	Roof Fitting Loss Factor KFb(lb-mole/yr mPn)	m	Losses(lb)
Rim Seal Losses (lb):					
Seal Factor A (lb-mole/yr):	10,567.2040	6,7000			
Seal Factor B (lb-mole/yr):	0,2000	0,2313			
Value of Vapor Pressure Function:					
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	8,9804				
Tank Diameter (ft):	110,0000				
Vapor Molecular Weight (lb/lb-mole):	62,0000				
Product Factor:	1,0000				
Withdrawal Losses (lb):	213,5840				
Number of Columns:	7,0000				
Effective Column Diameter (ft):	1,1000				
Annual Net Throughput (gall/yr):	116,422,236,0000				
Shut Casing Factor (doil/000 scfd):	0,0015				
Average Organic Liquid Density (lb/gal):	5,6000				
Tank Diameter (ft):	110,0000				
Deck Fitting Losses (lb):	12,644,7994				
Value of Vapor Pressure Function:	0,2313				
Vapor Molecular Weight (lb/lb-mole):	62,0000				
Product Factor:	1,0000				
Tot. Roof Fitting Loss Factor (lb-mole/yr):	88,1,9000				
Deck Seam Losses (lb):	4,857,7544				
Deck Seam Length (ft):	1,900,6600				
Deck Seam Loss per Unit Length Factor (lb-mole/yr):	0,1400				
Deck Seam Length Factor(lb/ft):	0,0200				
Tank Diameter (ft):	110,0000				
Vapor Molecular Weight (lb/lb-mole):	62,0000				
Product Factor:	1,0000				
Total Losses (lb):	28,283,3418				
Roof Fitting Status					
Access Hatch (24-in. Diam.) Unbolted Cover, Ungasketed	1	36,00	5,90	1,20	516,11728
Automatic Gauge Flare (24-in. Diam.) Unbolted Cover, Ungasketed	1	14,00	5,40	1,10	200,7339
Column Wall (24-in. Diam.) Built-Up Co. Sliding Cover, Ungasketed	7	47,00	0,00	0,00	4,717,2457
Ladder Well (36-in. Diam.) Sliding Cover, Ungasketed	1	76,00	0,00	0,00	1,059,6881
Roof Leg or Hanger Well (24-in. Diam.) Adjustable	37	7,90	0,00	0,00	4,191,0353
Sample Pipe or Well (24-in. Diam.) Slit Fabric Seal 10% Open	1	12,00	0,00	0,00	172,0576
Sub Drain (1-in. Diameter) Vacuum Breaker (1-in. Diam.) Weighted Mech. Actuation, Gask.	97	1,20	0,00	0,00	1,668,9897
	1	6,20	1,20	0,94	88,8564

TANKS 4.0 Report

Page 8 of 13

TANKS 4.0.9d

Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual

80-8 (max hourly) - Internal Floating Roof Tank
Zachary, Louisiana

Losses(lbs)			
Components	Rim Seal Loss	Withdrawl Loss	Deck Fitting Loss
Gasoline (RVP 14)	10,587.20	213.58	12,644.80
			4,857.75
			28,283.34

**Marathon Pipe Line LLC
Zachary Station**

PSD Analysis for VOC - STEP 1 (exclude contemporaneous increases or decreases)

Proposed Equipment			
ID	Past Actual (tpy VOC)	Proposed ^a (tpy VOC)	Project Increases (tpy VOC)
T-1	0	11.09	11.09
T-4	0	7.61	7.61
T-9	0	7.42	7.42
T-14	0	11.09	11.09
T-13	0	2.39	2.39
V-1	0	0.19	0.19
		TOTAL	39.80

a - See Appendix A for calculations.

Project Affected Existing Equipment			
ID	Past Actual (tpy VOC)	Future Actual (tpy VOC)	Project Increases (tpy VOC)
150-11 ^b	13.51	13.72	0.21
268-10 ^b	20.92	21.27	0.35
268-2 ^b	23.92	23.98	0.06
268-3 ^b	24.60	24.81	0.21
268-5 ^b	0.09	0.32	0.23
268-6 ^b	0.13	0.31	0.17
268-7 ^b	24.81	25.37	0.56
80-8 ^b	1.66	11.35	9.69
T-12 ^b	2.56	3.71	1.16
RACK ^c	16.55	35.88	19.33
FUGITIVES ^d	N/A	N/A	0.03
		TOTAL	32.01

b - See "PSD Analysis Data for Existing Tanks" worksheet attached.

c - See "PSD Analysis Data for Loading Rack" worksheet attached.

d - Increase from project only was calculated. See "PSD Analysis Data for Fugitives" worksheet attached.

$$\begin{aligned} \text{Proposed Equipment Project Increases} &= 39.80 \\ \text{Affected Existing Equipment Project Increases} &= 32.01 \\ \text{Grand Total Project Increases} &= 71.80 \text{ tpy VOC} \end{aligned}$$

$$\text{VOC Significance Threshold} = 40.00 \text{ tpy VOC}$$

Project Increases exceed VOC Significance Threshold? **YES**

****PROCEED TO PSD ANALYSIS STEP 2****

**Marathon Pipe Line LLC
Zachary Station**

PSD Analysis for VOC - STEP 2 (include contemporaneous increases or decreases)

Proposed Equipment				
ID	Past Actual (tpy VOC)	Proposed ^a (tpy VOC)	Contemporaneous Change (tpy VOC)	Project Increases (tpy VOC)
T-1	0	11.09	N/A	11.09
T-4	0	7.61	N/A	7.61
T-9	0	7.42	N/A	7.42
T-14	0	11.09	N/A	11.09
T-13	0	2.39	N/A	2.39
V-1	0	0.19	N/A	0.19
TOTAL				39.80

a - Proposed emission rate calculations may be found in Appendix A

Project Affected Existing Equipment				
ID	Past Actual (tpy VOC)	Future Actual (tpy VOC)	Contemporaneous Change (tpy VOC)	Project Increases (tpy VOC)
150-11 ^b	13.51	13.72	N/A	0.21
268-10 ^b	20.92	21.27	N/A	0.35
268-2 ^b	23.92	23.98	N/A	0.06
268-3 ^b	24.60	24.81	N/A	0.21
268-5 ^b	0.09	0.32	N/A	0.23
268-6 ^b	0.13	0.31	N/A	0.17
268-7 ^b	24.81	25.37	N/A	0.56
80-8 ^b	1.66	11.35	N/A	9.69
T-12 ^b	2.56	3.71	N/A	1.16
RACK ^c	16.55	35.88	-14.35	4.98
FUGITIVES ^d	N/A	N/A	N/A	0.03
TOTAL				17.66

b - See "PSD Analysis Data for Existing Tanks" worksheet attached.

c - See "PSD Analysis Data for Loading Rack" worksheet attached. Contemporaneous decrease is due to loading emissions being captured by vapor combustor.

d - Increase from project only was calculated. See "PSD Analysis Data for Fugitives" worksheet attached.

Proposed Equipment Project Increases =	39.80
Affected Existing Equipment Project Increases =	17.66
Grand Total Project Increases =	57.45 tpy VOC
VOC Significance Threshold = 40.00 tpy VOC	

Project Increases exceed VOC Significance Threshold? **YES**

****BACT IS REQUIRED FOR PSD AFFECTED ITEMS****

Marathon Pipe Line LLC
Zachary Station

PSD Analysis Data for Existing Tanks

Past Actual Emissions

Source ID	Description	2004 Actual ^a (lbs/yr)	2005 Actual ^a (lbs/yr)	2004 Actual ^a (tpy)	2005 Actual ^a (tpy)
150-11	Gasoline/Distillates Tank	26820.42	27212.62	13.41	13.61
268-10	Gasoline/Distillates Tank	41278.20	42416.53	20.64	21.21
268-2	Gasoline/Distillates Tank	47875.30	47792.28	23.94	23.90
268-3	Gasoline/Distillates Tank	48993.77	49406.92	24.50	24.70
268-5	Distillates Tank	174.83	183.55	0.09	0.09
268-6	Distillates Tank	260.68	265.02	0.13	0.13
268-7	Gasoline/Distillates Tank	50504.82	48720.49	25.25	24.36
80-8	Distillates Tank	6552.27	75.50	3.28	0.04
T-12	Transmix Tank	7379.27	2849.73	3.69	1.42

a - 2004/2005 actual emission rates were obtained from facility.

Future Actual Emissions (@42 turnovers/yr)

Source ID	Description	TANKS 4.0 ^b (lbs/yr)	TANKS 4.0 ^b (tpy)
150-11	Gasoline/Distillates Tank	27444.8	13.72
268-10	Gasoline/Distillates Tank	42538.75	21.27
268-2	Gasoline/Distillates Tank	47962.98	23.98
268-3	Gasoline/Distillates Tank	49626.96	24.81
268-5	Distillates Tank	635.68	0.32
268-6	Distillates Tank	611.93	0.31
268-7	Gasoline/Distillates Tank	50731.42	25.37
80-8 ^c	Gasoline/Distillates Tank	22691.81	11.35
T-12	Transmix Tank	7429.64	3.71

b - Emission rates were estimated using TANKS 4.09d assuming 42 turnover per year. TANKS runs are attached.

c - In addition to distillate, gasoline is proposed to be stored in tank.

PSD Analysis Data - Existing Tanks

Source ID	Description	2004 Actual (tpy)	2005 Actual (tpy)	2004/2005 Past Actual (tpy)	Future Actual (42 Turnovers/yr) (tpy)
150-11	Gasoline/Distillates Tank	13.41	13.61	13.51	13.72
268-10	Gasoline/Distillates Tank	20.64	21.21	20.92	21.27
268-2	Gasoline/Distillates Tank	23.94	23.90	23.92	23.98
268-3	Gasoline/Distillates Tank	24.50	24.70	24.60	24.81
268-5	Distillates Tank	0.09	0.09	0.09	0.32
268-6	Distillates Tank	0.13	0.13	0.13	0.31
268-7	Gasoline/Distillates Tank	25.25	24.36	24.81	25.37
80-8	Gasoline/Distillates Tank	3.28	0.04	1.66	11.35
T-12	Transmix Tank	3.69	1.42	2.56	3.71
CAP TOTAL		114.92	109.46	112.19	124.84

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics
Identification

User Identification: Zachary Tank 80-8 (@ 42 T.O.)
 City: Zachary
 State: Louisiana
 Company: Marathon Pipe Line, LLC
 Type of Tank: Internal Floating Roof Tank
 Description: Gasoline/Distillates Tank

Tank Dimensions

Diameter (ft):	110.00
Volume (gallons):	2,771,958.00
Turnovers:	42.00
Self Supp. Roof? (Y/N):	N
No. of Columns:	7.00
Eff. Col. Diam. (ft):	1.10

Paint Characteristics

Internal Shell Condition:	Light Rust
Shell Color/Shade:	White/White
Shell Condition:	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Rim-Seal System

Primary Seal:	Vapor-mounted
Secondary Seal:	None

Deck Characteristics

Deck Fitting Category:	Typical
Deck Type:	Bolted
Construction:	Sheet
Deck Seam:	Sheet: 5 Ft Wide
Deck Seam Len. (ft):	1,900.66

Deck Fitting/Status

	Quantity
Access Hatch (24-in. Diam.)/Unbolted Cover, Ungasketed	1
Automatic Gauge Float Well/Bolted Cover, Ungasketed	1
Column Well (24-in. Diam.)/Built-Up Col. Sliding Cover, Ungask.	7
Ladder Well (36-in. Diam.)/Sliding Cover, Ungasketed	1
Roof Leg or Hanger Well/Adjustable	37
Sample Pipe or Well (24-in. Diam.)/Slit Fabric Seal 10% Open	1
Stub Drain (1-in. Diameter)/Slit Fabric Seal 10% Open	97
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1

Meteorological Data used in Emissions Calculations: Baton Rouge, Louisiana (Avg Atmospheric Pressure = 14.72 psia)

TANKS 4.0.9d
Emissions Report - Detail Format
Liquid Contents of Storage Tank

Zachary Tank 80-8 (@ 42 T.O.) - Internal Floating Roof Tank
Zachary, Louisiana

Mixture/Component	Month	Avg.	Daily Liquid Surf. Temperature (deg F)	Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Vapor Mol. Weight Max.	Vapor Mol. Weight Min.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Gasoline (RVP 12)	All	69.60	64.20	74.99	67.70	7.5928	N/A	N/A	64.0000	92.00	Option 4: RVP=12, ASTM Slope=3

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

Zachary Tank 80-8 (@ 42 T.O.) - Internal Floating Roof Tank
Zachary, Louisiana

Annual Emission Calculations					
Rim Seal Losses (lb):	8,462,204.3				
Seal Factor A (lb-mole/yr):	6,700.0				
Seal Factor B (lb-mole/yr):	0.2000				
Value of Vapor Pressure Function:	0.1794				
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	7.5928				
Tank Diameter (ft):	110.000				
Vapor Molecular Weight (lb/lb-mole):	64.0000				
Product Factor:	1.0000				
Whitewall Losses (lb):	213,584.0				
Number of Columns:	7,000.0				
Effective Column Diameter (ft):	1.1000				
Annual Net Throughput (gallons):	116,422,296.0000				
Shell Clingage Factor (lb/1000 sqft):	0.0015				
Average Organic Liquid Density (lb/gal):	5,600.0				
Tank Diameter (ft):	110.0000				
Deck Fitting Losses (lb):	10,125,940.3				
Value of Vapor Pressure Function:	0.1794				
Vapor Molecular Weight (lb/lb-mole):	64.0000				
Product Factor:	1.0000				
Tot. Roof Fitting Loss Factor (lb/mole/yr):	881,900.0				
Deck Seam Losses (lb):	3,890,084.0				
Deck Seam Length (ft):	1,900,660.0				
Deck Seam Loss per Unit Length Factor (lb-mole/yr):	0.1400				
Deck Seam Length Factor (ft/sqft):	0.2000				
Tank Diameter (ft):	110.0000				
Vapor Molecular Weight (lb/lb-mole):	64.0000				
Product Factor:	1.0000				
Total Losses (lb):	22,691,812.5				
Roof Fitting Loss Factors					
Roof Fitting Status	Quantity	KFa (lb-mole/yr)	KFb (lb-mole/(yr mph ²))	m	Losses(lb)
Access Hatch (24-in. Diam.) Unbolted Cover, Ungasketed Automatic Gauge Float Well Unbolted Cover, Ungasketed Column Well (24-in. Diam.)/Built-Up Coll Sliding Cover, Ungask.	1	36.00	5.90	1.20	413,330.5
Ladder Well (36-in. Diam.)/Sliding Cover, Ungasketed Roof Leg or Hanger Well/Adjustable Sample Pipe or Well (24-in. Diam.)/Slit Fabric Seal 10% Open Stub Drain (1-in. Diameter)/	7	14.00	5.40	1.10	160,747.4
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1	47.00	0.00	0.00	3,777,584.7
Ladder Well (36-in. Diam.)/Sliding Cover, Ungasketed Roof Leg or Hanger Well/Adjustable Sample Pipe or Well (24-in. Diam.)/Slit Fabric Seal 10% Open Stub Drain (1-in. Diameter)/	37	76.00	0.00	0.00	872,628.9
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	97	12.00	0.00	0.00	3,356,176.8
Ladder Well (36-in. Diam.)/Sliding Cover, Ungasketed Roof Leg or Hanger Well/Adjustable Sample Pipe or Well (24-in. Diam.)/Slit Fabric Seal 10% Open Stub Drain (1-in. Diameter)/	1	1.20	0.00	0.00	1,336,500.1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1	6.20	0.94	0.94	71,188.2

TANKS 4.0 Report

Page 4 of 5

TANKS 4.0.9d**Emissions Report - Detail Format
Individual Tank Emission Totals****Emissions Report for: Annual****Zachary Tank 80-8 (@ 42 T.O.) - Internal Floating Roof Tank
Zachary, Louisiana**

Components	Gasoline (RVP 12)	Losses(lbs)			Total Emissions
		Rim Seal Loss	Withdrawl Loss	Deck Fitting Loss	
		213.58	10,125.94	3,890.08	22,691.81

Marathon Pipe Line LLC, AI No. 689
Zachary Station
Jackson, East Feliciana Parish, Louisiana

TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

Source ID	Description	LA/C33/III Chapter										40 CFR 60						40 CFR					
		9	11	15	21	51	56	59	A	K	Ka	Kb	XX	61	63	64	68						
Facility		1		1	3	1	3																
150-11	Gasoline/Distillates Tank		1										1	3	3	3	3						
268-2	Gasoline/Distillates Tank		1										1	3	3	3	3						
268-3	Gasoline/Distillates Tank		1										1	3	3	3	3						
268-7	Gasoline/Distillates Tank		1										1	3	3	3	3						
268-10	Gasoline/Distillates Tank		1										1	3	3	3	3						
T-12	Transmix Tank		1										1	3	3	3	3						
T-1	Gasoline/Distillates Tank		1										3	3	3	1	1						
T-4	Gasoline/Distillates Tank		1										3	3	1	1	1						
T-9	Gasoline/Distillates Tank		1										3	3	1	1	1						
T-13	Transmix Tank		1										3	3	1	1	1						
T-14	Gasoline/Distillates Tank		1										3	3	1	1	1						
268-6	Refined Products/Distillates Tank		1										1	3	3	3	3						
80-8	Refined Products/Distillates Tank		1										1	3	3	3	3						
268-5	Refined Products/Distillates Tank		1										3	1	3	3	3						
V-1	Vapor Combustor		1																				
RACK	Transmix Truck Loading Rack																	3					
FUG	Fugitive Emissions																						

KEY TO MATRIX

1. - The regulations have applicable requirements which apply to this particular emission source.
 - The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
2. - The regulations have applicable requirements which apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criteria, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
3. - The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, fugitives) but do not apply to this particular emission source.

Blank - The regulations clearly do not apply to this type of emission source.

Marathon Pipe Line LLC, AI No. 689
Zachary Station
Jackson, East Feliciana Parish, Louisiana

TABLE 2: LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

EMISSION POINT NO / IDENTIFIER	APPLICABLE REQUIREMENT	COMPLIANCE METHOD/PROVISION	NOTES
Facility	Emissions Inventory (EI) [LAC 33.III.919]	Submit Emission Inventory (EI): Due annually by March 31 st for Jan 1 to Dec 31 for the previous year in accordance with LAC 33:III.919.D.	
	Housekeeping [LAC 33:III.2113]	Best practical housekeeping and maintenance practices must be maintained.	
	Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33.III: Chapter 51] STATE ONLY	DOES NOT APPLY. Facility is not a major source for toxic air pollutants.	
	Prevention of Air Pollution Emergency Episode [LAC 33:III.5611]	When requested by the administrative authority, a standby plan will be submitted.	
	Chemical Accident Prevention and Minimization of Consequences [LAC 33:III.Chapter 59]	DOES NOT APPLY. Zachary Station does not meet the definition of a covered process.	
	Chemical Accident Prevention Provisions [40 CFR 68]	DOES NOT APPLY. Zachary Station does not store more than the threshold quantity of regulated substances in a process.	
150-11 268-2 268-3 268-7 268-10 T-12 80-8	Storage of Volatile Organic Compounds [LAC 33:III.2103]	Tanks are equipped with internal floating roofs and submerged fill pipe or vapor loss control system. These tanks meet the requirements of LAC 33:III.2103.C.	

Marathon Pipe Line LLC, AI No. 689
Zachary Station
Jackson, East Feliciana Parish, Louisiana

TABLE 2: LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

EMISSION POINT NO / IDENTIFIER	APPLICABLE REQUIREMENT	COMPLIANCE METHOD/PROVISION	NOTES
(continued)			
150-11 268-2 268-3 268-7 268-10 T-12 80-8	NSPS Subpart K- Standards of Performance for Storage Vessels for Petroleum Liquids [40 CFR 60.112]	The affected facility to which this subpart applies is each storage vessel for petroleum liquids which either has a capacity greater than 40,000 gallons but not exceeding 65,000 gallons and commenced construction, reconstruction, or modification after March 8, 1974 and prior to May 19, 1978 or has a capacity greater than 65,000 gallons and commenced construction or modification after June 11, 1973 and prior to May 19, 1978	Equipped with internal floating roofs.
	NSPS Subpart Ka- Standards of Performance for Storage Vessels for Petroleum Liquids [40 CFR 60.110a]	DOES NOT APPLY. The affected facility to which this subpart applies is each storage vessel used to store petroleum liquids with a storage capacity greater than 40,000 gallons for which construction, reconstruction, or modification commenced after May 18, 1978.	Tanks were constructed before May 18, 1978.
	NSPS Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels [40 CFR 60.110b]	DOES NOT APPLY. The affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m^3) that is used to store volatile organic liquids (VOLs) for which construction, reconstruction, or modification commenced after July 23, 1984.	Tanks were constructed before July 23, 1984.
T-1 T-4 T-9 T-13 T-14	Storage of Volatile Organic Compounds [LAC 33:III.2103]	Tanks are equipped with internal floating roofs and submerged fill pipe or vapor loss control system. These tanks meet the requirements of LAC 33:III.2103.C.	

Marathon Pipe Line LLC, AI No. 689
Zachary Station
Jackson, East Feliciana Parish, Louisiana

TABLE 2: LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

EMISSION POINT NO / IDENTIFIER	APPLICABLE REQUIREMENT	COMPLIANCE METHOD/PROVISION	NOTES
(continued)			
T-1	NSPS Subpart K- Standards of Performance for Storage Vessels for Petroleum Liquids [40 CFR 60.1112]	DOES NOT APPLY. The affected facility to which this subpart applies is each storage vessel for petroleum liquids which either has a capacity greater than 40,000 gallons but not exceeding 65,000 gallons and commenced construction, reconstruction, or modification after June 11, 1973 and prior to May 19, 1978	Proposed storage tanks will be subject to NSPS Subpart Kb.
T-4	NSPS Subpart Ka- Standards of Performance for Storage Vessels for Petroleum Liquids [40 CFR 60.110a]	DOES NOT APPLY. The affected facility to which this subpart applies is each storage vessel used to store petroleum liquids with a storage capacity greater than 40,000 gallons for which construction, reconstruction, or modification commenced after May 18, 1978.	Proposed storage tanks will be subject to NSPS Subpart Kb.
T-9	NSPS Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels [40 CFR 60.110b]	The affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 m ³ that is used to store volatile organic liquids (VOLs) for which construction, reconstruction, or modification commenced after July 23, 1984.	Proposed storage tanks will be equipped with internal floating roofs.
T-13	Storage of Volatile Organic Compounds [LAC 33:III.2103]	Tank is equipped with internal floating roof and submerged fill pipe or vapor loss control system. This tank meets the requirements of LAC 33:III.2103.C.	
T-14			
268-5			

Marathon Pipe Line LLC, AI No. 689
Zachary Station
Jackson, East Feliciana Parish, Louisiana

TABLE 2: LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

EMISSION POINT NO / IDENTIFIER	APPLICABLE REQUIREMENT	COMPLIANCE METHOD/PROVISION	NOTES
(continued) 268 - 5	NSPS Subpart K- Standards of Performance for Storage Vessels for Petroleum Liquids [40 CFR 60.110]	DOES NOT APPLY. The affected facility to which this subpart applies is each storage vessel for petroleum liquids which either has a capacity greater than 40,000 gallons but not exceeding 65,000 gallons and commenced construction, reconstruction, or modification after June 11, 1973 and prior to May 19, 1978	Tank was constructed after May 19, 1978.
	NSPS Subpart K _a - Standards of Performance for Storage Vessels for Petroleum Liquids [40 CFR 60.110a]	The affected facility to which this subpart applies is each storage vessel used to store petroleum liquids with a storage capacity greater than 40,000 gallons for which construction, reconstruction, or modification commenced after May 18, 1978.	Tank is equipped with internal floating roof.
	NSPS Subpart K _b - Standards of Performance for Volatile Organic Liquid Storage Vessels [40 CFR 60.110b]	DOES NOT APPLY. The affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 m ³ that is used to store volatile organic liquids (VOLs) for which construction, reconstruction, or modification commenced after July 23, 1984.	Tanks were constructed before July 23, 1984.
268-6	Storage of Volatile Organic Compounds [LAC 33.III.2103]	Tanks are equipped with internal floating roofs and submerged fill pipes or vapor loss system. These tanks meet the requirements of LAC 33.III.2103.C.	

Marathon Pipe Line LLC, AI No. 689
Zachary Station
Jackson, East Feliciana Parish, Louisiana

TABLE 2: LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

EMISSION POINT NO / IDENTIFIER	APPLICABLE REQUIREMENT	COMPLIANCE METHOD/ PROVISION	NOTES
(continued) 268-6	NSPS Subpart K- Standards of Performance for Storage Vessels for Petroleum Liquids [40 CFR 60.110]	Applies to each storage vessel storing petroleum liquids which either has a capacity greater than 40,000 gallons but not exceeding 65,000 gallons and commenced construction, reconstruction, or modification after March 8, 1974 and prior to May 19, 1978 or has a capacity greater than 65,000 gallons and commenced construction or modification after June 11, 1973 and prior to May 19, 1978.	Vapor Pressure is < 1.5 psia; therefore, subject only to recordkeeping and reporting requirements.
	NSPS Subpart Ka- Standards of Performance for Storage Vessels for Petroleum Liquids [40 CFR 60.110a]	DOES NOT APPLY. The affected facility to which this subpart applies is each storage vessel used to store petroleum liquids with a storage capacity greater than 40,000 gallons for which construction, reconstruction, or modification commenced after May 18, 1978.	Tanks were constructed before May 19, 1978.
	NSPS Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels [40 CFR 60.110b]	DOES NOT APPLY. The affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m^3) that is used to store volatile organic liquids (VOLs) for which construction, reconstruction, or modification commenced after July 23, 1984.	Tanks were constructed before July 23, 1984.
V-1	Control of Air Pollution from Smoke [LAC 33:III.1101]	The emission of smoke shall be controlled so that the shade or appearance of the emission is not darker than 20% average opacity.	
RACK	Truck Loading of VOC [LAC 33:III.2107]	Complies with this regulation by routing loading emissions to vapor combustor (V-1).	Vapor combustor is determined as BACT.

Marathon Pipe Line LLC, AI No. 689
Zachary Station
Jackson, East Feliciana Parish, Louisiana

TABLE 2: LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

EMISSION POINT NO / IDENTIFIER	APPLICABLE REQUIREMENT	COMPLIANCE METHOD/PROVISION	NOTES
(continued) RACK	NSPS Subpart XX - Standards of Performance for Bulk Gasoline Terminals [40 CFR 60.500]	DOES NOT APPLY. Gasoline is not handled at the transmix truck loading rack.	
FUGITIVES	Fugitive Emission Control [LAC 33.III.2121]	DOES NOT APPLY. Zachary Station is not a petroleum refinery, natural gas processing plant, SOCMI, or MTBE industry.	

Marathon Pipe Line LLC, AI No. 689
Zachary Station
Jackson, East Feliciana Parish, Louisiana

TABLE 3: LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

EMISSION POINT NO / IDENTIFIER	APPLICABLE COMPLIANCE REQUIREMENT	MONITORING, REPORTING & RECORDKEEPING (MRR) METHOD/PROVISIONS	NOTES
Facility-wide	General Regulations on Control of Emissions and Emission Standards [LAC 33:III.918 and 919]	Retain records for 5 years. Submit emission inventory data per requirements of LAC 33:III.919 by March 31 st for the previous calendar year.	Recordkeeping and Reporting
	Air Pollution Emergency [LAC 33:III.5609]	When LDEQ declares an Air Pollution Warning, the facility shall activate the preplanned strategy listed in LAC 33:III.5611. During air pollution alert, air pollution warning or air pollution emergency, standby plans shall be made available on the premises for LDEQ-OEC inspection.	Recordkeeping
80-8 150-11 268-2 268-3 268-6 268-7 268-10 T-12	Control of Emission of Organic Compounds [LAC 33:III.2103.I]	Keep for 2 years equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1-7, as applicable.	Recordkeeping
T-1 T-4 T-9 T-13 T-14	NSPS Subpart K- Standards of Performance for Storage Vessels for Petroleum Liquids [40 CFR 60.113]	Maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period, except as provided in 40 CFR 60.113(l).	Recordkeeping
	Control of Emission of Organic Compounds [LAC 33:III.2103.I]	Keep for 2 years equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1-7, as applicable.	Recordkeeping

Marathon Pipe Line LLC, AI No. 689
Zachary Station
Jackson, East Feliciana Parish, Louisiana

TABLE 3: LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

EMISSION POINT NO / IDENTIFIER	APPLICABLE COMPLIANCE REQUIREMENT	MONITORING, REPORTING & RECORDKEEPING (MRR) METHOD/PROVISIONS	NOTES
(continued) T-1 T-4 T-9 T-13 T-14	NSPS Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels [40 CFR 60.115b]	<ul style="list-style-type: none"> - Furnish Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(1) and §60.113b(a)(1). - Keep records of inspections in accordance with 40 CFR 60.115b(a)(2) - Report results of annual visual inspections in accordance with 40 CFR 60.115b(a)(3). - Report results of inspections required by 40 CFR 60.113b(a)(3) in accordance with §60.113b(a)(4). 	MRR
268 - 5	Control of Emission of Organic Compounds [LAC 33:III.2103.I]	<ul style="list-style-type: none"> - Keep for 2 years equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1-7, as applicable. 	Recordkeeping
	NSPS Subpart Ka- Standards of Performance for Storage Vessels for Petroleum Liquids [40 CFR 60.110a]	<ul style="list-style-type: none"> - Submit notification to LDEQ at least 30 days prior to the gap measurement to afford LDEQ to have an observer present. - Notify LDEQ within 60 days of the date of the measurement if the measure seal gap exceeds the limitations specified by 40 CFR 60.112a per 40 CFR 60.113a(a)(1)(iv)(D). - Maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period, except as provided in 40 CFR 60.115a(d). 	Recordkeeping and Reporting

Marathon Pipe Line LLC, AI No. 689
 Zachary Station
 Jackson, East Feliciana Parish, Louisiana

TABLE 3: LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

EMISSION POINT NO / IDENTIFIER	APPLICABLE COMPLIANCE REQUIREMENT	MONITORING, REPORTING & RECORDKEEPING (MRR) METHOD/PROVISIONS	NOTES
268-6	Control of Emission of Organic Compounds [LAC 33:III.2103.J]	Keep for 2 years equipment/operational data recordkeeping by electronic or hard copy continuously. Keep records of the information specified in LAC 33:III.2103.I.1-7, as applicable.	Recordkeeping
	NSPS Subpart K- Standards of Performance for Storage Vessels for Petroleum Liquids [40 CFR 60.113]	Maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period, except as provided in 40 CFR 60.113(d).	Recordkeeping

Marathon Pipe Line LLC, AI No. 689
Zachary Station
Jackson, East Feliciana Parish, Louisiana

TABLE 4: COMPLIANCE TESTING REQUIREMENTS

EMISSION POINT NO / IDENTIFIER	APPLICABLE COMPLIANCE TEST METHOD	CRITERIA BEING TESTED	NOTES
N/A	N/A	N/A	N/A

Note: No performance tests are required for any emission source at the Zachary Station.

Marathon Pipe Line LLC, AI No. 689
Zachary Station
Jackson, East Feliciana Parish, Louisiana

TABLE 5: EQUIPMENT LIST

EMISSION POINT NO / IDENTIFIER	DESCRIPTION	NOTES
RACK	Transmix Truck Loading Rack	Emissions controlled by vapor combustor (V-1)